

**Iowa Department of Natural Resources  
Title V Operating Permit**

**Name of Permitted Facility: The Dexter Company**  
**Facility Location: 905 West Depot, Fairfield, IA 52556**  
**Air Quality Operating Permit Number: 99-TV-058-M002**  
**Expiration Date: 11/30/04**

**EIQ Number: 92-1370**  
**Facility File Number: 51-01-005**

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**Responsible Official**

**Name: Al Ehret**  
**Title: President and CEO**  
**Mailing Address: 2211 West Grimes, Fairfield, IA 52556**  
**Phone #: (515) 472-5131**

**Permit Contact Person for the Facility**

**Name: Tom Kunkle**  
**Title: Plant Manager**  
**Mailing Address: 2211 West Grimes, Fairfield, IA 52556**  
**Phone #: (515) 472-5131**

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

**For the Director of the Department of Natural Resources**

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Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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## Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
gr./dscf.....	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NSPS.....	new source performance standard
ppmv.....	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu.....	pounds per million British thermal units
TPY.....	Tons per year
USEPA.....	United States Environmental Protection Agency
VMT/hr.....	vehicle miles traveled per hour

## **Pollutants**

PM.....	particulate matter (equivalent to TSP, total suspended particulate)
PM <sub>10</sub> .....	Particulate matter ten microns and less in diameter
SO <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: The Dexter Company

Permit Number: 99-TV-058-M002

Facility Description: Gray and Ductile Iron Foundry

Equipment List		
Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description
101F	101	Scrap Storage
201	102	Cupola
225	103	Induction Furnaces
104F	104	Manual Pour and Cool
105F	105	Disa A and B Mold Pour and Cool
203	105	Disa A and B Mold Pour and Cool
106F	106	Disa C Mold Pour and Cool
218	106	Disa C Mold Pour and Cool
107F	107	Shakeout
205	107	Shakeout
108F	108	20 X 26 Shakeout
203	108	20 X 26 Shakeout
109F	109	Disa A and B Shakeout
204	109	Disa A and B Shakeout
110F	110	Disa C Shakeout
110F-A	110	Disa C Shakeout
111F	111	Tumbler 1
218	112	Tumblers 2 & 3
113F	113	Tumbler 4
114F	114	Grinding
114F-A	114	Grinding
114F-B	114	Grinding
114F-C	114	Grinding
114F-D	114	Grinding
115F	115	Mold Sand Storage
116F	116	Bond Storage
208	117AB	Disa A/B Muller
218	117C	Disa C Muller
208	153	Manual Dump Station
205	118	Manual Mulling

<b>Emission Point Number</b>	<b>Associated Emission Unit(s) Number (s)</b>	<b>Associated Emission Unit Description</b>
119F	119	Prepared Sand Transfer
120F	120	Manual Mold
121F	121	20 X 26 Automold
204	121	20 X 26 Automold
122F	122	Resin Sand Storage
211	123	Core Sand Storage
124F	124	Shell Core Making
125F	125	Oil Core Making
126F	126	Isocure Core Making
129F	129	Manual Return Sand
205	129	Manual Return Sand
130F	130	Disa Return Sand
218	130	Disa Return Sand
215	131	Paint Dip Tank
216-A	132	Boiler 1
216	134	Boiler 2
137	137	Emergency Generator
146F	146	Tumblers 5 & 6
147F	147	Haul Road
148F	148	Charging Chute
149F	149	Coke Storage Pile
150F	150	Limestone Storage Pile
222	151	Paint Booth
152	152	Emergency Generator

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### Insignificant Equipment List

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Insignificant Emission Unit Number	Insignificant Emission Unit Description
127	Shell Core Curing
128	Oil Core Curing
138	No. 2 Distillate Tank (5,000 gal. Capacity)
139	Gasoline Tank (300 gal. Capacity)
140	Waste Oil Tank (1,500 gal. Capacity)
141	No. 2 Distillate Tank (300 gal. Capacity)
142	No. 2 Distillate Tank (300 gal. Capacity)
143	No. 2 Distillate Tank (200 gal. Capacity)
144	No. 2 Distillate Tank (200 gal. Capacity)
153	No. 2 Distillate Tank (500 gal. Capacity)
154	Kerosene Tank (300 gal. Capacity)
136	Ductile Iron Dryer
145	Air Make-Up Units (1-6)

## II. Plant-Wide Conditions

Facility Name: The Dexter Company

Permit Number: 99-TV-058-M002

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

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### Permit Duration

The term of this permit is: 5 years

Commencing on: 12/1/99

Ending on: 11/30/04

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

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*Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:*

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567--IAC 23.3(2)"d"

SO<sub>2</sub>: 500 parts per million by volume

Authority for Requirement: 567--IAC 23.3(3)"e"

Particulate Matter: No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance,

as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567--IAC 23.3(2)"c"



### III. Emission Point-Specific Conditions

Facility Name: The Dexter Company

Permit Number: 99-TV-058-M002

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#### **Emission Point ID Number: EP 101F Fugitive Emissions (External)**

##### Associated Equipment

Associated Emission Unit ID Numbers: 101

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#### **Applicable Requirements**

Emission Unit vented through this Emission Point: 101

Emission Unit Description: Scrap Storage

Raw Material/Fuel: Scrap Iron

Rated Capacity: 20 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

#### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 201**

### Associated Equipment

Associated Emission Unit ID Numbers: 102  
Emissions Control Equipment ID Number: CE 301  
Emissions Control Equipment Description: Baghouse

Emissions Control Equipment ID Number: CE 312  
Emissions Control Equipment Description: Afterburner

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 102  
Emission Unit Description: Cupola  
Raw Material/Fuel: Metal Melt  
Rated Capacity: 20 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limits: 40 %  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limits: 6.0 lb/hr, 30.63 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 92-A-474-S3

Pollutant: PM-10  
Emission Limit(s): 6.0 lb/hr, 20.63 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 92-A-474-S3

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit(s): 54.36 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 92-A-474-S3

Pollutant: Nitrogen Oxide (NO<sub>x</sub>)  
Emission Limit(s): 32.76 lb/hr, 73.44 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 92-A-474-S3

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 29 lb/hr, 129.54 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 92-A-474-S3

Pollutant: Lead (Pb)

Emission Limit(s): 0.55 lb/hr, 1.13 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 92-A-474-S3

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits:**

- 1) The maximum sulfur content of the coke that fuels the cupola, must be 0.6%, by weight.
- 2) The maximum and routine (90% operating time) temperature of the gas stream entering the baghouse must be 500 degrees Fahrenheit and 450 degrees Fahrenheit respectively. A temperature-monitoring device must be properly installed, calibrated and maintained, which continuously measures the inlet gas temperature to the baghouse.
- 3) A maximum of 91,800 tons per 12 months (rolled monthly) of either steel, scrap iron or silver pig, is permitted to be melted using this cupola. This limit allows this permit to be a synthetic minor. It cannot be removed unless additional control equipment is put on to control NO<sub>x</sub> and lead, or a PSD permit (minimum one year after startup date under this permit) is obtained.
- 4) The pressure drop range of the baghouse must be consistent with the manufacturer's recommendations and specifications and must be consistent with the values observed during the stack test.

**Process Throughput:** 20 tons/hr

#### **Reporting & Record Keeping:**

- 1) Monthly records must be kept that show the following
  - a) quantity of gray iron produced
  - b) percent sulfur in the coke
- 2) Records must be kept which show the pressure drop of the baghouse and the inlet gas temperature to the baghouse. Records must be satisfactory to demonstrate either there was no exceedance of the temperature and the pressure drop requirements or the exceedance was handled according to the excess emissions requirements found in chapter 24 of the Iowa Administrative Codes.

All records, as required above, shall be satisfactory for demonstrating compliance with all applicable operating limits.

Authority for Requirement: Iowa DNR Construction Permit 92-A-474-S3

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Additional Requirements**

*This emission point shall conform to the conditions listed below.*

Stack Height (feet): 70<sup>(1)</sup>

Stack Diameter (feet): 4.5<sup>(2)</sup>

Stack Exhaust Flow Rate (scfm): 70,000<sup>(2)</sup>

Stack Temperature (°F): 175<sup>(2)</sup>

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒<sup>(2)</sup>

Authority for Requirement: <sup>(1)</sup> Iowa DNR Construction Permit 00-A-592

<sup>(2)</sup> Iowa DNR Construction Permit 92-A-474-S3

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Stack Testing:**

Pollutant – TSP

1st Stack Test to be Completed by (date) – 11/30/01

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10

1st Stack Test to be Completed by (date) – 11/30/01

Test Method - Iowa Compliance Sampling Manual

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Nitrogen Oxide (NOx)

1st Stack Test to be Completed by (date) - 11/30/01

Test Method – EPA Reference Method 7 or Equivalent

Authority for Requirement– 567 IAC 22.108(3)

Pollutant – Lead (Pb)

1st Stack Test to be Completed by (date) - 11/30/01

Test Method – EPA Reference Method 12

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Carbon Monoxide (CO)

1st Stack Test to be Completed by (date) - 11/30/00

2nd Stack Test to be Completed between (dates) – 5/30/02 and 5/30/03

Test Method – EPA Reference Method 10

Authority for Requirement – 567 IAC 22.108(3)

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment: Particulate Matter  
PM-10  
CO

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Baghouse Agency Operation and Maintenance Plan**

### Baghouse Parameters

- Name of Unit: Cupola EU 102
- Control Equipment: Baghouse CE 301
- Pollutant Controlled: Particulate Matter (TSP)  
PM-10

### Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

### General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

### Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and action will be taken as soon as possible, but no later than 8 hours. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range corrective action will be taken within 8 hours to return the pressure drop to normal.

Normal Operating Range: 5.0" to 8.0" W.C.

- Check and document the exhaust stream inlet temperature. If the temperature exceeds the normal maximum, specified by the manufacturer, corrective action will be taken to return the temperature to normal.

Normal Maximum Temperature: 475<sup>0</sup>F

Maintain a written record of the observation and any action resulting from the inspection.

### Monthly

- Check the cleaning sequence of the baghouse. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.
- Check the hopper functions and performance. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

### Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.) If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

### Semiannual

- Inspect every 6 months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

### Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

### Quality Control

The filter equipment will be operated and maintained according to the manufacturers recommendations.

All instruments and equipment will be calibrated, maintained, and operated according to manufacturer's specifications.

Corrective action will be achieved through the spare parts inventory located in the maintenance parts storage area. The storage area will maintain critical parts as recommended by the manufacturer.

Authority for Requirement: 567 IAC 22.108(3)"b"



## Afterburner Agency Operation and Maintenance Plan

### Afterburner Parameters

- Name of Unit: EU 102 Cupola
- Control Equipment: Afterburner CE 312
- Pollutant Controlled: Carbon Monoxide (CO)

### Monitoring Guidelines

- Temperature monitoring of cupola secondary combustion zone
- Operator monitoring of equipment integrity
  - A. Cupola
  - B. Afterburner

### Performance Criteria and Corrective Action

- Temperature monitoring of cupola secondary combustion zone
  - A. The secondary combustion temperature will be maintained within a range of 1200 to 1600 °F for proper CO combustion. The target range of operation is 1500 to 1600 °F. The afterburners shall run continuously during cupola operations.
  - B. In the event that the temperature is outside the range for proper CO combustion, corrective action will be taken. Corrective action shall be initiated within eight hours. Operational parameters (including coke load) will be inspected for indications of disruptions of disruptions in normal cupola melt and afterburner processes. Disruptions will be corrected to bring the temperature back to the proper CO combustion range. The secondary combustion temperature must remain in the target range.
- Operator monitoring of equipment integrity
  - A. Weekly inspections will check and maintain the integrity and function of the cupola and afterburner. ISO 9000 standards have been established to detail operating procedures.
  - B. Corrective action will be achieved through the spare parts inventory located in the maintenance parts storage area. The storage area will maintain critical parts as recommended by the manufacturer. Corrective action shall be initiated within eight hours.

### Record Keeping and Reporting

The following records will be maintained for a five year period to demonstrate ongoing compliance. The records will be available upon request.

- A. Temperature of cupola secondary combustion zone.
- B. Checklist with dates and initials of each inspection and maintenance action.
- C. Corrective actions for discovered temperature excursions or equipment failures.

Semi-annual reports will include the time and duration of all instances of readings recorded outside of the indicated performance criteria range [except for during periods of startup and shutdown of the cupola and the afterburner](#). The semi-annual reports will also include a [certification](#) that appropriate corrective actions were promptly taken or a certification that all readings were within the indicated range before operations continued.

### Quality Control

All instruments and equipment will be calibrated, maintained, and operated according to the manufacturers specifications.

The implementation procedures of this plan will be available upon request. These procedures include inspection checklists, operator standard operating procedures, and the spare parts inventory.

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 225**

### Associated Equipment

Associated Emission Unit ID Numbers: 103

Emissions Control Equipment ID Number: CE 317

Emissions Control Equipment Description: Fabric Filter-Type Dust Collector

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 103

Emission Unit Description: Four Induction Furnaces

Raw Material/Fuel: Metal Melt

Rated Capacity: 6.5 tons/hr for each furnace

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 %<sup>(1)</sup>

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.061 lb/hr, 0.194 ton/yr<sup>(2)</sup>, 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 00-A-592  
567 IAC 23.4(5)

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.061 lb/hr, 0.194 ton/yr<sup>(2)</sup>, 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 00-A-592  
567 IAC 23.4(5)

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits. If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> TPY limits included to make this project minor for PSD

## **Operational Limits & Requirements**

Process throughput:

The total operation of the four furnaces of this permit shall be limited to not more than 13.5 tons of melt per hour, and an annual production of not more than 86,000 tons per year. These conditions shall remain in effect and without change for a minimum of 5 years from the issue date of Iowa DNR Construction Permit 00-A-592.

Reporting & Record keeping:

The permit holder shall maintain production records to show the total hourly melt (measured in tons) attributed to the four furnaces of this permit. The permit holder shall also maintain production records to show the monthly melt (measured in tons) attributed to the aggregate operation of the four furnaces of this permit. Monthly melt data shall be used to determine annual production values. Consecutive monthly production melt records shall be used to determine the annual production melt attributed to aggregate operation of the four furnaces of this permit. Annual production shall be computed monthly by summing the monthly production for the previous twelve months.

All records as required by this permit shall be kept on site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable limits. Records shall be legible and maintained in an orderly manner.

Authority for requirement: Iowa DNR Construction Permit 00-A-592

## **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

## **Additional Requirements**

*This emission point shall conform to the conditions listed below.*

Stack Height (feet): 40

Stack Diameter (inches): 45

Stack Exhaust Flow Rate (acfm): 49,440

Stack Temperature (°F): 195

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-592

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

Stack Testing:

Pollutant: PM

Test to be completed by: <sup>(1)</sup>

Test Method: Iowa Compliance Sampling Method 5

Authority for Requirement: Iowa DNR Construction Permit 00-A-592

Pollutant: PM<sub>10</sub>

Test to be completed by: <sup>(1)</sup>

Test Method: 40 CFR 51, Appendix M, 201A with 202

Authority for Requirement: Iowa DNR Construction Permit 00-A-592

<sup>(1)</sup> If specified above, the permittee shall verify compliance with the emission limitations within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment. The tests shall be conducted with the equipment operating in a manner representative of maximum rated capacity. Failure to test at the rated capacity may be cause for the Department to limit the emission unit to the operating level at which the compliance tests had been conducted.

Authority for Requirement: IDNR Construction Permit 00-A-592

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 104F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 104

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 104

Emission Unit Description: Manual Pour and Cool

Raw Material/Fuel: Metal Melt

Rated Capacity: 10.924 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 105F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 105

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 105

Emission Unit Description: Disa A and B Mold, Pour, and Cool

Raw Material/Fuel: Metal Melt

Rated Capacity: 16.646 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 203**

### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 105, 108

Emissions Control Equipment ID Number: CE 302

Emissions Control Equipment Description: Baghouse

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### **Applicable Requirements**

(If more than one emission unit vents through this emission point subdivide the applicable requirements by emission unit.)

Emission Unit vented through this Emission Point: 105

Emission Unit Description: Disa A and B Mold, Pour, and Cool

Raw Material/Fuel: Metal Melt

Rated Capacity: 16.646 ton/hr

Emission Unit vented through this Emission Point: 108

Emission Unit Description: 20 X 26 Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 10.924 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Particulate Matter (TSP)

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 95-A-381

Pollutant: Sulfur Dioxide(SO<sub>2</sub>)

Emission Limit(s): 0.2 lbs/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-381

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 1.4 lbs/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-381

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 6.5 lbs/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-381

Pollutant: Lead (Pb)

Emission Limit(s): 0.007 lbs/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-381



### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Additional Requirements**

*This emission point shall conform to the conditions listed below.*

Stack Height (feet): 54<sup>(1)</sup>

Stack Diameter (inches): 60<sup>(2)</sup>

Stack Exhaust Flow Rate (scfm): 48,182<sup>(2)</sup>

Stack Temperature (°F): 200<sup>(2)</sup>

Vertical, Unobstructed Discharge Required: Yes ☒<sup>(2)</sup> No ☐

Authority for Requirement: <sup>(1)</sup> Iowa DNR Construction Permit 00-A-592

<sup>(2)</sup> Iowa DNR Construction Permit 95-A-381

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Stack Testing:**

Pollutant - TSP

1st Stack Test to be Completed by (date) - 11/30/01

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement – 567 IAC 22.108(3)

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐**

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 106F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 106

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 106  
Emission Unit Description: Disa C Mold, Pour, and Cool  
Raw Material/Fuel: Metal Melt  
Rated Capacity: 8.689 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Number: EP 218

### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 106, 112, 117C, 130

Emissions Control Equipment ID Number: CE 313

Emissions Control Equipment Description: Baghouse

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### **Applicable Requirements**

(If more than one emission unit vents through this emission point subdivide the applicable requirements by emission unit.)

Emission Unit vented through this Emission Point: 106

Emission Unit Description: Disa C Mold, Pour, and Cool

Raw Material/Fuel: Metal Melt

Rated Capacity: 8.689 ton/hr

Emission Unit vented through this Emission Point: 112

Emission Unit Description: Tumblers 2 and 3

Raw Material/Fuel: Metal Castings

Rated Capacity: 15.0 ton/hr

Emission Unit vented through this Emission Point: 117C

Emission Unit Description: Disa C Muller

Raw Material/Fuel: Sand

Rated Capacity: 100.00 ton/hour

Emission Unit vented through this Emission Point: 130

Emission Unit Description: Disa Return Sand

Raw Material/Fuel: Sand

Rated Capacity: 185.00 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits: 40 %<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 95-A-382-S2  
567 IAC 23.3(2)"d"

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 95-A-382-S2

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limits: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Emission Point Characteristics**

*This emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 60

Stack Diameter (inches): 54

Stack Exhaust Flow Rate (scfm): 65,000

Stack Temperature (°F): 120

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 95-A-382-S2

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Stack Testing:**

Pollutant - TSP

1st Stack Test to be Completed by (date) - 11/30/01

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10

1st Stack Test to be Completed by (date) - 11/30/01

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement – 567 IAC 22.108(3)

*Note: Stack testing was performed 05/09/00 and a retest was done on 7/11/00.*

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment: TSP  
PM-10

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Baghouse Agency Operation and Maintenance Plan**

### Baghouse Parameters

- Name of Unit(s): EU 106 Poor and Cool  
EU 112 Tumblers 2 and 3  
EU 117C Disa C Muller  
EU 130 Disa Sand Return
- Control Equipment: CE 313 Baghouse
- Pollutant Controlled: TSP  
PM-10

### Monitoring Guidelines

The facility commits to take timely corrective action during periods of excursion when indicators are out of range. Corrective action may include an investigation of the reason for the excursion, evaluation of the situation, and necessary follow-up action to return operation to within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If abnormal conditions are detected through the monitoring, corrective action will be taken within eight hours. If the corrective action fails to return the indicators to the appropriate range, the facility will report the exceedance to the Iowa DNR and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with the emission limits, then new indicator ranges will be set for monitoring, and the new ranges must be incorporated into the operating permit. If the test demonstrates noncompliance with emission limits, then within 60 days the facility proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

### General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

### Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed, this would be an exceedance not a violation, and corrective action will be taken. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions. At least three attempts should be made to retake opacity readings at approximately two hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the baghouse static pressure drop. If the pressure drop falls out of the normal operating range, corrective action will be taken within eight (8) hours to return the pressure drop to normal.  
Normal Operating Range: 5.0" to 8.0" W.C.

### Monthly

- Check the cleaning sequence of the baghouse. If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.
- Check the hopper function and performance. If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

### Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.) If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

### Semiannual

- Inspect every six (6) months all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

### Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and will be available upon request.

### Quality Control

The filter equipment will be operated and maintained according to the manufacturers recommendations.

All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer's specifications.

Corrective action will be achieved through the spare parts inventory located in the maintenance parts storage area. The storage area will maintain critical parts as recommended by the manufacturer.

Authority for Requirement: 567 IAC 22.108(3)"b"



**Emission Point ID Number: EP 107F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 107

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 107

Emission Unit Description: Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 10.924 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Number: EP 205

### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 107, 118, 129

Emissions Control Equipment ID Number: CE 304

Emissions Control Equipment Description: Baghouse

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### **Applicable Requirements**

(If more than one emission unit vents through this emission point subdivide the applicable requirements by emission unit.)

Emission Unit vented through this Emission Point: 107

Emission Unit Description: Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 10.924 ton/hr

Emission Unit vented through this Emission Point: 118

Emission Unit Description: Manual Mulling

Raw Material/Fuel: Sand

Rated Capacity: 100.00 ton/hr

Emission Unit vented through this Emission Point: 129

Emission Unit Description: Manual Sand Return

Raw Material/Fuel: Sand

Rated Capacity: 100.00 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits: 40 %<sup>(1)</sup>

Authority for Requirement: [Iowa DNR Construction Permit 88-A-014-S1](#)  
567 IAC 23.3(2)"d"

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, [Opacity Limits](#), an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (TSP)

Emission Limit(s): 0.05 gr/dscf

Authority for Requirement: [Iowa DNR Construction Permit 88-A-014-S1](#)  
567 IAC 23.4(6)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

The permit holder shall maintain production records to show the total hourly sand throughput for the emission units of this permit.

Authority for Requirement: Iowa DNR Construction Permit 88-A-014-S1

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Emission Point Characteristics**

*This emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 83<sup>(1)(2)</sup>

Stack Diameter (feet): 2.58<sup>(1)</sup>

Stack Exhaust Flow Rate (scfm): 25,000<sup>(1)</sup>

Stack Temperature (°F): 72<sup>(1)</sup>

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒<sup>(1)</sup>

Authority for Requirement: <sup>(1)</sup> Iowa DNR Construction Permit 88-A-014-S1

<sup>(2)</sup> Iowa DNR Construction Permit 00-A-592

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Stack Testing:**

Pollutant - TSP

1st Stack Test to be Completed by (date) - 11/30/01

Test Method - Iowa Compliance Sampling Manual

Authority for Requirement — 567 IAC 22.108(3)

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment: TSP

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

### **Baghouse Agency Operation and Maintenance Plan**

#### Baghouse Parameters

- Name of Unit: EU 107 Shakeout  
EU 118 Manual Mulling  
EU 129 Manual Sand Return
- Control Equipment: CE 304 Baghouse
- Pollutant Controlled: TSP  
PM-10

#### Monitoring Guidelines

The facility commits to take timely corrective action during periods of excursion when indicators are out of range. Corrective action may include an investigation of the reason for the excursion, evaluation of the situation, and necessary follow-up action to return operation to within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If abnormal conditions are detected through the monitoring, corrective action will be taken within eight hours. If the corrective action fails to return the indicators to the appropriate range, the facility will report the exceedance to the Iowa DNR and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with the emission limits, then new indicator ranges will be set for monitoring, and the new ranges must be incorporated into the operating permit. If the test demonstrates noncompliance with emission limits, then within 60 days the facility proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

### General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

### Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed, this would be an exceedance not a violation, and corrective action will be taken. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions. At least three attempts should be made to retake opacity readings at approximately two hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, corrective action will be taken within eight (8) hours to return the pressure drop to normal.

Normal Operating Range: 5.0" to 8.0" W.C.

Maintain a written record of the observation and any action resulting from the inspection.

### Monthly

- Check the cleaning sequence of the baghouse. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.
- Check the hopper function and performance. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

### Quarterly

- Thoroughly inspect bags for leaks and wear. Look for obvious holes or tears in the bags.) If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

### Semiannual

- Inspect every six (6) months all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods.
- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

### Record Keeping and Reporting

Maintenance and inspection records will be kept for five (5) years and will be available upon request.

### Quality Control

The filter equipment will be operated and maintained according to the manufacturer recommendations.

All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer specifications.

Corrective action will be achieved through the spare parts inventory located in the maintenance parts storage area. The storage area will maintain critical parts as recommended by the manufacturer.

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 108F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 108

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 108

Emission Unit Description: 20 X 26 Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 10.924 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 109F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 109

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 109

Emission Unit Description: Disa A and B Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 15.206 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"



## **Emission Point ID Number: EP 204**

### **Associated Equipment**

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 109, 121

Emissions Control Equipment ID Number: CE 303

Emissions Control Equipment Description: Baghouse

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### **Applicable Requirements**

(If more than one emission unit vents through this emission point subdivide the applicable requirements by emission unit.)

Emission Unit vented through this Emission Point: 109

Emission Unit Description: Disa A and B Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 15.206 ton/hr

Emission Unit vented through this Emission Point: 121

Emission Unit Description: 20 X 26 Automold

Raw Material/Fuel: Mold Sand

Rated Capacity: 43.694 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (TSP)

Emission Limit(s): 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

Pollutant: PM-10

Emission Limit: 1.92 lbs/hr

Authority for Requirement: Iowa DNR Construction Permit 93-A-227

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Stack Testing:**

Pollutant - TSP

1st Stack Test to be Completed by (date) - 11/30/01

Test Method - Iowa Compliance Sampling Manual

Authority for Requirement — 567 IAC 22.108(3)

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐**

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 110F Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 110

Emissions Control Equipment ID Number: CE 314

Emissions Control Equipment Description: Cartridge Filter

---

### **Applicable Requirements**

Emission Unit vented through this Emission Point: 110

Emission Unit Description: Disa C Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 8.689 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

#### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 110F-A Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 110

Emissions Control Equipment ID Number: CE 314

Emissions Control Equipment Description: Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 110

Emission Unit Description: Disa C Shakeout

Raw Material/Fuel: Metal Melt

Rated Capacity: 8.689 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

#### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 111F Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 111

Emissions Control Equipment ID Number: CE 310

Emissions Control Equipment Description: Cartridge Filter

---

### **Applicable Requirements**

Emission Unit vented through this Emission Point: 111

Emission Unit Description: Tumbler 1

Raw Material/Fuel: Metal Castings

Rated Capacity: 9.0 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

#### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"



## **Emission Point ID Number: EP 113F Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 113

Emissions Control Equipment ID Number: CE 314

Emissions Control Equipment Description: Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 113

Emission Unit Description: Tumbler 4

Raw Material/Fuel: Metal Castings

Rated Capacity: 7.5 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

#### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 114F Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 114  
Emissions Control Equipment ID Number: CE 310  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 311  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 314  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE315  
Emissions Control Equipment Description: Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 114  
Emission Unit Description: Grinding  
Raw Material/Fuel: Metal Castings  
Rated Capacity: 20.627 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: 114F-A Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 114  
Emissions Control Equipment ID Number: CE 310  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 311  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 314  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 315  
Emissions Control Equipment Description: Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 114  
Emission Unit Description: Grinding  
Raw Material/Fuel: Metal Castings  
Rated Capacity: 20.627 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: 114F-B Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 114  
Emissions Control Equipment ID Number: CE 310  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 311  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 314  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 315  
Emissions Control Equipment Description: Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 114  
Emission Unit Description: Grinding  
Raw Material/Fuel: Metal Castings  
Rated Capacity: 20.627 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"



## **Emission Point ID Number: 114F-C Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 114  
Emissions Control Equipment ID Number: CE 310  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 311  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 314  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 315  
Emissions Control Equipment Description: Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 114  
Emission Unit Description: Grinding  
Raw Material/Fuel: Metal Castings  
Rated Capacity: 20.627 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: 114F-D Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers: 114  
Emissions Control Equipment ID Number: CE 310  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 311  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 314  
Emissions Control Equipment Description: Cartridge Filter  
Emissions Control Equipment ID Number: CE 315  
Emissions Control Equipment Description: Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 114  
Emission Unit Description: Grinding  
Raw Material/Fuel: Metal Castings  
Rated Capacity: 20.627 ton/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 115F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 115

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 115

Emission Unit Description: Mold Sand Storage

Raw Material/Fuel: Mold Sand

Rated Capacity: 60.0 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 116F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 116

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 116

Emission Unit Description: Bond Storage

Raw Material/Fuel: Mold Material

Rated Capacity: 60.0 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 208**

### Associated Equipment

Associated Emission Unit ID Numbers: 117AB and 153

Emissions Control Equipment ID Number: CE 307

Emissions Control Equipment Description: Baghouse

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 117AB

Emission Unit Description: Disa A and B Muller

Raw Material/Fuel: Sand

Rated Capacity: 70 ton/hr total for EU 117AB and 153

Emission Unit vented through this Emission Point: 153

Emission Unit Description: Manual Dump Station

Raw Material/Fuel: Sand

Rated Capacity: 70 ton/hr total for EU 117AB and 153

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits: 40 %<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 95-A-380-S1  
567 IAC 23.3(2)"d"

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (TSP)

Emission Limits: 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 95-A-380-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

The total production throughput of sand through the emission units of this permit shall be limited to not more than 70 tons per hour.

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

The permit holder shall maintain production records to show the total hourly sand throughput for the emission units of this permit.

Authority for Requirement: Iowa DNR Construction Permit 95-A-380-S1

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Emission Point Characteristics**

*This emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 60

Stack Diameter (feet): 2.58

Stack Exhaust Flow Rate (scfm): 22,845

Stack Temperature (°F): 72

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 95-A-380-S1



### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Stack Testing:**

Pollutant - TSP

1st Stack Test to be Completed by (date) - 11/30/01

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement - 567 IAC 22.108(3)

*Note: TSP stack testing was performed 02/23/00, and then The Dexter Company took a 70 ton/hour production limit in lieu of retesting.*

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐**

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 119F Fugitive Emissions (Internal)**  
**Associated Equipment**

Associated Emission Unit ID Numbers: 119

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 119

Emission Unit Description: Prepared Sand Transfer

Raw Material/Fuel: Sand

Rated Capacity: 100.0 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 120F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 120

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 120

Emission Unit Description: Manual Mold

Raw Material/Fuel: Mold Sand

Rated Capacity: 43.694 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 121F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 121

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 121

Emission Unit Description: 20 X 26 Automold

Raw Material/Fuel: Mold Sand

Rated Capacity: 43.694 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 122F Fugitive Emissions (External)**

Associated Equipment

Associated Emission Unit ID Numbers: 122

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 122

Emission Unit Description: Resin Sand Storage

Raw Material/Fuel: Resin Sand

Rated Capacity: 60.0ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 211**

### Associated Equipment

Associated Emission Unit ID Numbers: 123  
Emissions Control Equipment ID Number: CE 309  
Emissions Control Equipment Description: Bag Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 123  
Emission Unit Description: Core Sand Storage  
Raw Material/Fuel: Mold/Core Material  
Rated Capacity: 60.00 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limits: 40 %  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (TSP)  
Emission Limit(s): 0.05 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 86-A-043

#### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Stack Testing:**

Pollutant - TSP

1st Stack Test to be Completed by (date) - 11/30/01

Test Method - Iowa Compliance Sampling Manual

Authority for Requirement — 567 IAC 22.108(3)

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐**

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 124F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 124

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 124

Emission Unit Description: Shell Core Making

Raw Material/Fuel: Sand

Rated Capacity: 0.738 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"



**Emission Point ID Number: EP 125F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 125

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 125

Emission Unit Description: Oil Core Making

Raw Material/Fuel: Core Oil

Rated Capacity: 0.278 gal/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No applicable requirements at this time.

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 126F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 126

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 126

Emission Unit Description: Isocure Core Making

Raw Material/Fuel: Isocure and Catalyst

Rated Capacity: 1.75 gal/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No applicable requirements at this time.

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 129F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 129

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 129

Emission Unit Description: Manual Return Sand

Raw Material/Fuel: Sand

Rated Capacity: 100.00 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 130F Fugitive Emissions (Internal)**

Associated Equipment

Associated Emission Unit ID Numbers: 130

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 130

Emission Unit Description: Disa Return Sand

Raw Material/Fuel: Sand

Rated Capacity: 185.00ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 215**

Associated Equipment

Associated Emission Unit ID Numbers: 131

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**Applicable Requirements**

Emission Unit vented through this Emission Point: 131

Emission Unit Description: Paint Dip Tank

Raw Material/Fuel: Paint

Rated Capacity: 0.000522 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No Applicable Requirements

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 216-A**

### Associated Equipment

Associated Emission Unit ID Numbers: 132

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 132

Emission Unit Description: Boiler 1

Raw Material/Fuel: Natural Gas and No. 2 Fuel Oil Backup

Rated Capacity: 0.045 1000 gal/hr, 0.0063 mmcf/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits: 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limits: 0.8 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

### **Operational Limits & Requirements:**

*The owner/operator of this equipment shall comply with the following operational limits and requirements.*

#### Process Throughput:

A. The fuel burned by this unit shall be limited to natural gas and No. 2 fuel oil.

Authority for Requirement: 567 IAC 22.108(3)

1. The sulfur content of natural gas combusted by this source is not to exceed Twenty-five (25) grains per 100 standard cubic feet of input gas.
2. No person shall allow, cause or permit the combustion of number one or number two fuel oil exceeding a sulfur content of 0.5% by weight

Authority for Requirement: 567 IAC 23.3(3)

**Reporting & Record Keeping:** The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The owner/operator shall obtain two reports per year from the fuel oil supplier, one in July and one in December, to verify the sulfur content of the fuel oil.

Authority for Requirement: 567 IAC 22.108(3)"b"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 216**

### Associated Equipment

Associated Emission Unit ID Numbers: 134

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: 134

Emission Unit Description: Boiler 2

Raw Material/Fuel: Natural Gas and Fuel Oil Backup

Rated Capacity: 0.035 1000 gal/hr, 0.0049 mmcf/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits: 20 %<sup>(1)</sup>

Authority for Requirement: 567 IAC 23.3(2)"d" (Iowa DNR Construction Permit 98-A-161)

<sup>(1)</sup>A no visible emission action level has been requested by the facility

Pollutant: Total Particulate (TSP)

Emission Limits: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a" (Iowa DNR Construction Permit 98-A-161)

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limits: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b" (Iowa DNR Construction Permit 98-A-161)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### Process Throughput:

1. Boiler is limited to natural gas and No. 2 distillate fuel oil.
2. Sulfur content will not exceed 0.05% of the natural gas or No. 2 distillate fuel oil.

Reporting & Record Keeping: All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained at the facility for a minimum of five (5) years and made available to the Iowa DNR upon request.

1. Quantity of natural gas consumed in million cubic feet per 12 month period rolled monthly.
2. Quantity of No. 2 distillate fuel oil in gallons consumed per 12 month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 98-A-161



**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Additional Requirements**

*This emission point shall conform to the conditions listed below.*

Stack Height (feet): 34

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 952

Stack Temperature (°F): 330

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-161

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>20 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(13)

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 137**

### Associated Equipment

Associated Emission Unit ID Numbers : 137

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### **Applicable Requirements**

Emission Unit vented through this Emission Point : 137

Emission Unit Description : Emergency Generator

Raw Material/Fuel: Fuel Oil

Rated Capacity: 1.2 MMBTU/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits : 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limits : 0.8 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

### **Operational Limits & Requirements:**

*The owner/operator of this equipment shall comply with the following operational limits and requirements.*

#### Process Throughput:

1. The fuel burned by this unit shall be limited to number one or number two fuel oil.  
Authority for Requirement: 567 IAC 22.108(3)
2. No person shall allow, cause or permit the combustion of number one or number two fuel oil exceeding a sulfur content of 0.5% by weight

Authority for Requirement: 567 IAC 23.3(3)

**Reporting & Record Keeping:** The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The owner/operator shall obtain two reports per year from the fuel oil supplier, one in July and one in December, to verify the sulfur content of the fuel oil.

Authority for Requirement: 567 IAC 22.108(3)"b"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 146F Fugitive Emissions (Internal)**

### Associated Equipment

Associated Emission Unit ID Numbers : 146

Emissions Control Equipment ID Number : CE 311

Emissions Control Equipment Description : Cartridge Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point : 146

Emission Unit Description : Tumblers 5 & 6

Raw Material/Fuel: Metal Castings

Rated Capacity: 18 tons/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit : No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered , repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 147F Fugitive Emissions (External)**

Associated Equipment

Associated Emission Unit ID Numbers : 147

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**Applicable Requirements**

Emission Unit vented through this Emission Point : 147

Emission Unit Description : Haul Road

Raw Material/Fuel: Steel

Rated Capacity: 0.072644 vmt/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit : No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered , repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 148F Fugitive Emissions (External)**

Associated Equipment

Associated Emission Unit ID Numbers : 148

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**Applicable Requirements**

Emission Unit vented through this Emission Point : 148

Emission Unit Description : Charging Chute

Raw Material/Fuel: Scrap Iron

Rated Capacity: 20 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit : No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered , repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement : 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement : 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 149F Fugitive Emissions (External)**

Associated Equipment

Associated Emission Unit ID Numbers : 149

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**Applicable Requirements**

Emission Unit vented through this Emission Point : 149

Emission Unit Description : Coke Storage Pile

Raw Material/Fuel: Coke

Rated Capacity: 2.339954 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit : No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered , repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: EP 150F Fugitive Emissions (External)**

Associated Equipment

Associated Emission Unit ID Numbers : 150

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**Applicable Requirements**

Emission Unit vented through this Emission Point : 150

Emission Unit Description : Limestone Storage Pile

Raw Material/Fuel: Limestone

Rated Capacity: 0.8 ton/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit : No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered , repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"



## **Emission Point ID Number: EP 222**

### Associated Equipment

Associated Emission Unit ID Numbers : 151

Emissions Control Equipment ID Number : CE 316

Emissions Control Equipment Description : Dry Filter Pads

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### **Applicable Requirements**

Emission Unit vented through this Emission Point : 151

Emission Unit Description : Paint Booth

Raw Material/Fuel: Paint

Rated Capacity: 0.0897 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits : 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (TSP)

Emission Limit(s) : 0.01 gr/dscf

Authority for Requirement: 567 IAC 23.4(13)

#### **Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process Throughput:**

1. This paint booth is limited to using no more than 6,000 gal /year of paint per twelve month period rolled monthly. This limit is based on the assumption of 100% solids and a density of 9 lb/gal.

#### **Reporting & Record keeping:**

1. Record the amount of paint used in the paint booth per month and keep a rolling twelve month total.
2. MSDS's showing the solids content of the paint used in the paint booth shall be kept with these records.

This limit was requested by the applicant.

Authority for Requirement: 567 IAC 22.108(13)

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment : TSP

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement : 567 IAC 22.108(3)"b"

## **Paint Filter Agency Operation and Maintenance Plan**

### **Monitoring Guidelines**

The Dexter Company commits to taking timely corrective action during periods of excursion. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation, and necessary follow-up action to correct the source operation. An excursion is defined for this source as the observation of visible emissions. An excursion does not necessarily indicate a violation of an applicable requirement. If corrective actions fail to return emissions to none visible or an opacity reading (if taken) confirms noncompliance, Dexter will report the exceedance to the department. If Dexter chooses to continue operation of the source, testing will be conducted within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates noncompliance with emission limits, then Dexter will propose a schedule within 60 days to implement the corrective action to bring the source into compliance and to demonstrate compliance.

### **General**

The following monitoring is not required during periods of time greater than one day in which the source does not operate.

### **Weekly**

- Observe visible emissions on a weekly basis to ensure no visible emissions during the operation of the source. If visible emissions are observed this would be an exceedance not a violation and action will be taken as soon as possible, but no later than 8 hours following the observation. Corrective action may include an opacity reading as an evaluation of the situation if alterations to the source operation do not return emissions to none visible. If weather conditions prevent the observer from conducting an opacity reading, the observer shall note such conditions on a data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, a reading shall be made the following day.
- Maintain a written record of the observation and any resulting action.

### **Monthly**

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This includes a visual inspection of the filters.
- If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within 8 hours.
- Maintain a written record of the inspection and any resulting action.

### **Record Keeping and Reporting**

Maintenance and inspection records will be kept for 5 years and available upon request.

### **Quality Control**

The filter equipment will be operated and maintained according to the manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: EP 152**

### Associated Equipment

Associated Emission Unit ID Numbers : 152

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### **Applicable Requirements**

Emission Unit vented through this Emission Point : 152

Emission Unit Description : Emergency Generator

Raw Material/Fuel: Fuel Oil

Rated Capacity: 1.2 MMBTU/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limits : 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limits : 0.8 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

### **Operational Limits & Requirements:**

*The owner/operator of this equipment shall comply with the following operational limits and requirements.*

#### Process Throughput:

1. The fuel burned by this unit shall be limited to number one or number two fuel oil.

Authority for Requirement: 567 IAC 22.108(3)

2. No person shall allow, cause or permit the combustion of number one or number two fuel oil exceeding a sulfur content of 0.5% by weight

Authority for Requirement: 567 IAC 23.3(3)

**Reporting & Record Keeping:** The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The owner/operator shall obtain two reports per year from the fuel oil supplier, one in July and one in December, to verify the sulfur content of the fuel oil.

Authority for Requirement: 567 IAC 22.108(3)"b"

**Compliance Plan**

*The owner/operator of this equipment shall comply with the applicable requirements listed below.*

**This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.**

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **IV. General Conditions**

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

### **G1. Duty to Comply**

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification ; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"3.*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

### **G2. Permit Expiration**

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

### **G3. Certification Requirement for Title V Related Documents**

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

### **G4. Annual Compliance Certification**

On March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides

for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

#### **G5. Semi-Annual Monitoring Report**

On March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5).

#### **G6. Annual Fee**

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
  - a. Form 1.0 "Facility Identification";
  - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
  - c. Form 5.0 "Title V annual emissions summary/fee"; and
  - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
  - a. Form 1.0 "Facility Identification";
  - b. Form 5.0 "Title V annual emissions summary/fee";
  - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year .
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

### **G7. Inspection of Premises, Records, Equipment, Methods and Discharges**

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit ;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

### **G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

### **G9. General Maintenance and Repair Duties**

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

### **G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses ; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.



3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

#### **G11. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

#### **G12. Hazardous Release**

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in *567 IAC 131.2(2)*. *567 IAC Chapter 131-State Only*

#### **G13. Excess Emissions and Excess Emissions Reporting Requirements**

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;

- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

#### **G14. Permit Deviation Reporting Requirements**

A deviation is an instance when any condition of this permit is violated. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above. Any violation of an applicable requirement shall be reported to the appropriate regional office by telephone or in person within seven (7) days of the violation. This report shall include the probable cause of such violation, and any corrective actions or preventive measures taken. Any other deviations shall be documented in the semi-annual report. *567 IAC 22.108(5)"b"*.

#### **G15. Notification Requirements for Sources That Become Subject to NSPS and HAP Regulations**

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants) or section 112 of the Act. This notification shall be submitted in writing to the department 30 days before the source becomes subject to the afore-mentioned standard or other requirement. *40 CFR part 63.9 as adopted in 567 IAC 23.1(4); 40 CFR part 60.7 as adopted in 567 IAC 23.1(2)*

#### **G16. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification**

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act.
  - e. The changes comply with all applicable requirements.
  - f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are

invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change.

*567 IAC 22.110.(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC*

*22.110.(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110.(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110.(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC*

*22.103.(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108 (11)*

#### **G17. Duty to Modify a Title V Permit**

##### **1. Administrative Amendment.**

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

## 2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

- i. Do not violate any applicable requirements
- ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
- iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
- iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
- v. Are not modifications under any provision of Title I of the Act; and
- vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
- ii. The permittee's suggested draft permit
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter

22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113

The permittee shall submit an application for a significant permit modification at least 6 months, but not more than 18 months prior to the date of the proposed modification. 567 IAC 22.105(1)a(2)

#### **G18. Duty to Obtain Construction Permits**

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1)

#### **G19. Asbestos**

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. IAC 23.1(3)"a", and 567 IAC 23.2

#### **G20. Open Burning**

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only

#### **G21. Acid Rain (Title IV) Emissions Allowances**

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

#### **G22. Stratospheric Ozone and Climate Protection (Title VI) Requirements**

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
  4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
  5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

### **G23. Permit Reopenings**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
  - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:

- a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
- b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
- c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
- d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
- e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

#### **G24. Permit Shield**

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *IAC 22.108 (18)*



**G25. Severability**

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

**G26. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

**G27. Transferability**

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. 567 IAC 22.111 (1)"d"

**G28. Disclaimer**

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

**G29. Notification and Reporting Requirements for Stack Tests or Monitor Certification**

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator

Iowa DNR, Air Quality Bureau  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

### **G30. Prevention of Air Pollution Emergency Episodes**

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

*567 IAC 26.1(1)*

### **G31. Contacts List**

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits  
EPA Region 7  
Air Permits and Compliance Branch  
901 N. 5th Street  
Kansas City, KS 66101  
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

#### **Field Office 1**

900 West Main – Suite D  
Manchester, IA 52057  
(319) 927-2640

#### **Field Office 2**

P.O. Box 1443  
2300-15th St., SW  
Mason City, IA 50401  
(515) 424-4073

#### **Field Office 3**

1900 N. Grand Ave.  
Spencer, IA 51301  
(712) 262-4177

#### **Field Office 4**

706 Sunnyside  
Atlantic, IA 50022  
(712) 243-1934

#### **Field Office 5**

607 East 2nd St.  
Des Moines, IA 50309  
(515) 281-9069

#### **Field Office 6**

1004 W. Madison  
Washington, IA 52353  
(319) 653-2135

#### **Polk County Public Works Dept.**

Air Quality Division  
5895 NE 14th St.  
Des Moines, IA 50313  
(515) 286-3351

#### **Linn County Health Dept.**

Air Pollution Control Division  
501 13th St., NW  
Cedar Rapids, IA 52405  
(319) 398-3551

## **APPENDIX A**

### **DNR Air Quality Policy 3-b-08 (Opacity Limits)**

1998 NOV 13 4

IOWA DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION

POLICY/PROCEDURE STATEMENT

<b>TOPIC:</b> <u>Opacity Limits</u>
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**Policy Procedure Number:**    3-b-08

**Replaces Number:**    None

**Date:**

**Effective Date:**    November 12, 1998

**Preparer:**    David Phelps

**Reviewer:**

**Approval:**    **Bureau Chief:**    Peter Hamlin

**Date:**    11/12/98

**Division Administrator:**    Allan Stokes

**Date:**    11/12/98

**Applicable Code of Iowa or Iowa Administrative Code Rule:**    23.3(2)d

**“No person shall allow, cause or permit the emission of visible air contaminants into the atmosphere from any equipment, internal combustion engine, premise fire, open fire or stack, equal to or in excess of 40 percent opacity or that level specified in a construction permit, except as provided below and in 567-Chapter 24.”**

**REASON OR BACKGROUND**

The default opacity limit allowed by regulation is 40%. This limit was established with the original regulations in 1970. It is generally accepted that opacity greater than 40% was evidence of a mass emission standard exceedence. More recently, there have been requests from facilities for limits much lower than that allowed by the regulations, in some cases less than 0.01 gr/scf to which a 40% opacity limit does not correspond. Since opacity is used as an indicator of the particulate emission rate, listing an indicated potential problem opacity that is more in line with the mass emission rate is useful. In order to have the authority to set limits lower than 40%, subrule 23.3(2)d was changed. This change allows the department the ability to set opacity limits at a level that more closely corresponds to what would be observed by the source when operating in compliance with its mass emission rate.

Except in the case where a specific opacity limit is established by rule, it has been the general policy of the Department not to take action on opacity limits directly. Rather, if it is felt that a violation of the mass emission rate exists that is not attributable to some abnormal event, a stack test would be required to verify compliance. However, the Department reserves the right to use the results of formal opacity readings as evidence of an exceedence.

## DETAILS

It shall be the policy of the Department to list the default opacity as a permit condition and in addition an indicator opacity may be listed.

For ease of proving continual compliance a source may request a 'no visible emissions' opacity limit which allows proof of compliance without having a certified opacity reading taken. In this case any visible emissions would be an exceedence.

The IDNR permit writer may list an opacity that will be a indicator of possible mass emission rate exceedence. If the permittee wishes, the recommended indicator opacity may be changed by demonstrating compliance with the mass emission rate during a stack test while emitting the new desired indicator opacity. If the tested mass emission rate is less than the permitted emission rate, then the desired indicator opacity may be set at a proportionally higher level than observed during the stack test.

If an opacity measurement, taken in accordance with an approved reference method for opacity, (generally USEPA Method 9 or 22) exceeds the indicator opacity then the facility will promptly investigate the source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require additional proof to demonstrate compliance with the mass emissions limits.

### **Recommended indicator opacities shall be:**

<b>Grain Loading gr./scf</b>	<b>Recommended Indicator Opacity</b>
<0.01 gr./scf	non specified in permit *
0.01 to 0.06 gr./scf	10% Opacity
0.061 to 0.08 gr./scf	20% Opacity
0.081 to 0.1 gr./scf	25% Opacity

\* A line is added to the permit that states: "If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard."

If a source is a batch process the indicator opacity shall be based on the table above, but the opacity averaging period, for comparison to the indicator opacity, shall be the entire batch cycle. For purposes of comparison the indicator opacity readings shall be taken during the entire cycle and averaged.

Sources are also given the opportunity to set source specific limits to be coordinated with the initial compliance test. These may then be incorporated into the permit.

In all cases an exceedence of the indicator opacity will require the permittee to file an "indicator opacity exceedence report" to the IDNR regional office. The reporting requirements shall be:

*Oral report of excess indicator opacity.* An incident of excess indicator opacity (other than an incident of excess indicator opacity during a period of startup, shutdown, or cleaning) shall be reported to the appropriate regional office of the department within eight hours of, or at the start of the first working day following the onset of the of the incident. The reporting exemption for an incident of excess indicator opacity during startup and shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in subrule 25.1(6).

An oral report of excess indicator opacity is not required for a source with operational continuous monitoring equipment (as specified in subrule 25.1(1) if the incident of excess indicator opacity continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity.

The oral report may be made in person or by telephone and shall include as a minimum the following:

- a) The identity of the equipment or source operation from which the excess indicator opacity originated and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and expected duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps being taken to remedy the excess indicator opacity.
- f) The steps being taken to limit the excess indicator opacity in the interim period.

*Written report of excess indicator opacity.* A written report of an incident of excess indicator opacity shall be submitted as a follow-up to all required oral reports to the department within seven (7) days of the onset of the upset condition, and shall include as a minimum the following:

- a) The identity of the equipment or source operation point from which the excess emission originate and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps that were taken to remedy and to prevent the recurrence of the incident of excess indicator opacity.
- f) The steps that were taken to limit the excess indicator opacity.
- g) If the owner claims that the excess indicator opacity was due to malfunction, documentation to support this claim.

Exceptions to this policy:

- 1) In the case where a facility has an opacity limit established in an existing permit, no change will be made to that permit limit unless the permit is being modified for other purposes.
- 2) If the facility has a continuous opacity monitor, this policy shall not apply.
- 3) This policy shall not apply to opacity limits established in Prevention of Significant Deterioration (PSD) permits or permits that were established for maintenance plans for nonattainment areas.
- 4) This policy shall not apply where an opacity limit is established as an indication of hazardous air pollutants.

- 5) This policy shall not apply where an opacity limit is established by a rule, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), etc.